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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|-------------------------|------------------|
| 09/941,162 | 08/28/2001 | Eric Silverberg | 1951.PSA | 4632 |
| 75 | 590 10/24/2002 | | | |
| Cynthia L. Foulke | | | EXAMINER | |
| National Starch and Chemical Company 10 Finderne Avenue Bridgewater, NJ 08807 | | | KEEHAN, CHRISTOPHER M | |
| | | | | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1712 | 0_ |
| | | | DATE MAILED: 10/24/2002 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| • (| Application No. | 123 | | | |
|--|---|--|--|--|--|
| | | Applicant(s) | | | |
| Offic Action Summary | 09/941,162 | SILVERBERG ET AL. | | | |
| l state of carminary | Examiner | Art Unit | | | |
| - The MAILING DATE of this a manufication on | Christopher M. Keehan | 1712 | | | |
| The MAILING DATE of this c mmunicati n appears on the c ver sheet with the correspondence address Peri d f r Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailin earmed patent term adjustment. See 37 CFR 1.704(b). Status | 136(a). In no event, however, may a reply within the statutory minimum of thirty will apply and will expire SIX (6) MONT | ply be timely filed (30) days will be considered timely. HS from the mailing date of this communication. | | | |
| 1) Responsive to communication(s) filed on 28. | <u>August 2001</u> . | | | | |
| 0.5 | nis action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disp sition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-17</u> is/are pending in the application | n | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | The second control of | | | | |
| 6)⊠ Claim(s) <u>1-17</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | |
| 9)☐ The specification is objected to by the Examine | r | | | | |
| | | Evening | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priori application from the International Bur | ity documents have been re | ceived in this National Stage | | | |
| * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) The translation of the foreign language prov 15) Acknowledgment is made of a claim for domestic | visional application has been | received | | | |
| Attachment(s) | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4/2. | E\ | nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152) | | | |

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DETAILED ACTION

Claim Objections

Claims 8-11 are objected to because of the following informalities: these claims refer to a polymer in claim 7, but claim 7 only contains a copolymer. Changing the polymer in these claims to copolymer would make this more clear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 102(e) as being unpatentable over Samukawa et al. (6,288,148 B1). Regarding claims 1-3, Samukawa et al. disclose a composition comprising an acrylic polymer (col.5, line 51-col.6, line 30) and rosin ester resins and terpene phenol resins that are liquid at 150°C or less to room temperature, and tackifiers with different softening points or of different types can be used as a mixture (col.6, lines 32-44). Samukawa et al. do not appear to specifically disclose wherein at least one tackifier having a softening point of less than about 40°C is a rosin ester tackifier, and wherein at least one tackifier having a softening point of greater than about 70°C is a terpene phenolics tackifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a rosin ester tackifier and a terpene phenolic tackifier as instantly claimed because Samukawa et al.

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teach that adding a mixture of rosin ester and terpene phenolic tackifier with softening points in the instantly claimed range produces excellent adhesion to polymer foams resulting in a higher quality product.

Regarding claim 4, Samukawa et al. disclose a terpene phenolic tackifier and a rosin ester tackifier (col.6, lines 32-39).

Regarding claim 5, Samukawa et al. disclose a glass transition temperature of -20°C or less, which is included in the instantly claimed range (col.5, lines 61-65).

Regarding claim 6, Samukawa et al. disclose wherein the copolymer is crosslinked using a crosslinking agent (col.8, line 62-col.9, line 3).

Regarding claims 7 and 9, Samukawa et al. disclose wherein the acrylic copolymer comprises at least one acrylate monomer containing from about 4 to about 18 carbon atoms in the alkyl group, more specifically 2-ethylhexyl acrylate (col.5, lines 55-60).

Regarding claims 8 and 11, Samukawa et al. disclose wherein the copolymer further comprises at least one carboxy functional monomer, more specifically acrylic acid (col.6, lines 10-15).

Regarding claim 10, Samukawa et al. disclose wherein the copolymer further comprises methyl acrylate (col.6, lines 1-9).

Regarding claims 12-14, Samukawa et al. disclose an article of manufacture comprising the adhesive of claim 1, more specifically a pressure sensitive adhesive tape (col.9, lines 48-52). Although Samukawa et al. do not appear to specifically disclose a label, Samukawa et al. do disclose a tape, and it is the Examiner's position that a tape

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can be a label, as it can serve the same purpose. Further, this appears to be an intended use limitation. The intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Regarding claims 15-17, Samukawa et al. disclose the instantly claimed limitations (col.10, lines 18-27).

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann et al. (4,087,392). Regarding claims 1-3, Hartmann et al. disclose a composition comprising an acrylic polymer (col.3, line 14-col.4, line 14) and rosin ester resins and terpene phenol resins are liquid between about 40°C and 150°C (col.4, lines 18-23), and tackifiers with different softening points can be used as a mixture (col.4 lines 46-57 and lines 29-45). Hartmann et al. do not appear to specifically disclose wherein at least one tackifier having a softening point of less than about 40°C is a rosin ester tackifier, and wherein at least one tackifier having a softening point of greater than about 70°C is a terpene phenolics tackifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a rosin ester

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tackifier and a terpene phenolic tackifier as instantly claimed because Hartmann et al. teach that adding a mixture of rosin ester and terpene phenolic tackifier with softening points in the instantly claimed range produces excellent adhesion to polymer sheets resulting in a higher quality product.

Regarding claim 4, Hartmann et al. disclose a terpene phenolic tackifier and a rosin ester tackifier (col.4, lines 29-45).

Regarding claim 5, Hartmann et al. disclose a pour point of generally between -15°C and 15°C (col.3, lines 61-65). Hartmann et al. do not specifically disclose a glass transition temperature. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pour point of Hartmann et al., at the lowest -15°C, to be necessarily higher than the glass transition temperature, and as the claimed glass transition temperature is about -20°C to about -30°C, this appears to be included in Applicant's claimed range.

Regarding claim 6, Hartmann et al. disclose wherein the copolymer is crosslinked using a crosslinking agent (col.6, lines 13-15).

Regarding claims 7 and 9, Hartmann et al. disclose wherein the acrylic copolymer comprises at least one acrylate monomer containing from about 4 to about 18 carbon atoms in the alkyl group, more specifically 2-ethylhexyl acrylate (col.3, lines 27-35).

Regarding claims 8 and 11, Hartmann et al. disclose wherein the copolymer further comprises at least one carboxy functional monomer and one hydroxy functional monomer, more specifically acrylic acid and hydroxypropyl acrylate (col.3, lines 43-58).

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Regarding claim 10, Hartmann et al. disclose wherein the copolymer further comprises methyl acrylate (col.3 lines 34-36).

Regarding claims 12-14, Hartmann et al. disclose an article of manufacture comprising the adhesive of claim 1, more specifically a pressure sensitive adhesive tape (col.6, lines 34-36).

Regarding claim 15, Hartmann et al. disclose a polymeric backing, wherein the adhesive is applied thereto (col.6, lines 38-42).

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann et al. (4,087,392) in view of Samukawa et al. (6,288,148 B1). Hartmann et al. and Samukawa et al., as applied to claim 1 above, are as set forth and incorporated herein. Regarding claim 16, Hartmann et al. do not appear to specifically disclose wherein a backing is polyurethane foam. Samukawa et al. disclose a polyurethane backing and double sided tape (col.10, lines 18-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a polyurethane foam and double sided tape as taught by Samukawa et al. in the tape of Hartmann et al. because Samukawa et al. a polyurethane foam backing produces and double sided tape produces excellent adhesion to polymer foams resulting in a higher quality product.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Venderbosch (6,350,514 B1) discloses an adhesive composition comprising an acrylic polymer and a mixture of a rosin ester and a phenol terpene resin. However, Venderbosch do not teach or disclose a rosin ester with Applicant's claimed softening point. The list of tackifiers in Venderbosch do not have the softening point as claimed by Applicant. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (703) 305-2778. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Dawson can be reached on 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Christopher Keehan C.M.

October 3, 2002

Robert Dawson
Supervisory Patent Examiner
Technology Center 1700